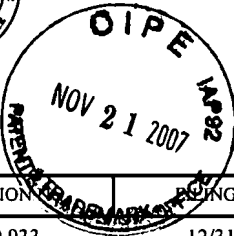




UNITED STATES PATENT AND TRADEMARK OFFICE

Ifw

UNITED STATES DEPARTMENT OF COMMERCE  
United States Patent and Trademark Office  
Address: COMMISSIONER FOR PATENTS  
P.O. Box 1450  
Alexandria, Virginia 22313-1450  
www.uspto.gov



APPLICATION	FILED DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/029,933	12/31/2001	Tommy Kristensen Bysted	042933/305182	5897

826 7590 11/14/2007  
ALSTON & BIRD LLP  
BANK OF AMERICA PLAZA  
101 SOUTH TRYON STREET, SUITE 4000  
CHARLOTTE, NC 28280-4000

EXAMINER

DEAN, RAYMOND S

ART UNIT PAPER NUMBER

2618

MAIL DATE DELIVERY MODE

11/14/2007

PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

## Office Action Summary

Application No.

10/029,933

Applicant(s)

BYSTED ET AL.

Examiner

Raymond S. Dean

Art Unit

2618

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

### Status

- 1) ☒ Responsive to communication(s) filed on 05 September 2007.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

### Disposition of Claims

- 4) ☒ Claim(s) 8-13 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 8-13 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 25 March 2002 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

### Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
  - ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

### Attachment(s)

- ☒ Notice of References Cited (PTO-892)
- ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- ☐ Information Disclosure Statement(s) (PTO/SB/08)  
Paper No(s)/Mail Date \_\_\_\_\_
- ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date. \_\_\_\_\_
- ☐ Notice of Informal Patent Application
- ☐ Other: \_\_\_\_\_

## DETAILED ACTION

### ***Continued Examination Under 37 CFR 1.114***

1. A request for continued examination under 37 CFR 1.114, including the fee set forth in 37 CFR 1.17(e), was filed in this application after final rejection. Since this application is eligible for continued examination under 37 CFR 1.114, and the fee set forth in 37 CFR 1.17(e) has been timely paid, the finality of the previous Office action has been withdrawn pursuant to 37 CFR 1.114. Applicant's submission filed on September 5, 2007 has been entered.

### ***Claim Rejections - 35 USC § 102***

2. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

3. Claims 8 – 13 are rejected under 35 U.S.C. 102(e) as being anticipated by Botha (US 7,272,769)

Regarding Claim 8, Botha teaches an apparatus comprising a processor for processing digital signals to produce a modulating signal for radio transmitter circuitry (Figure 2, Cols. 3 lines 3 – 5, lines 29 – 32, lines 45 – 47, typical UEs comprise

Art Unit: 2618

processors) the processor being configured to implement a protocol stack having a physical layer and a medium access control layer, above the physical layer, wherein the medium access control layer provides a plurality of transport channels which are combined and then interleaved to produce said modulating signal (Cols. 3 lines 29 – 60, 4 lines 1 – 38, the physical layer enables the creation of physical channels, the UMTS protocol stack comprises a MAC layer and a physical layer), each transport channel being configured to process a signal according to one of a plurality of process schemes, the configuration of which is established during a call setup (Cols. 3 lines 48 – 60, 4 lines 7 – 21, the cited operations are conducted during a call setup, CRC and rate matching are the process schemes).

Regarding Claim 9, Botha teaches all of the claimed limitations recited in Claim 8. Botha further teaches wherein said interleaving is performed on blocks of data constituting a plurality of bursts (Cols. 1 lines 25 – 27, 4 lines 30 – 38, GSM comprises data bursts).

Regarding Claim 10, Botha teaches all of the claimed limitations recited in Claim 8. Botha further teaches wherein the processor performs interleaving of said transport channels immediately before they are combined (Col. 4 lines 1 – 29).

Regarding Claim 11, Botha teaches all of the claimed limitations recited in Claim 8. Botha further teaches wherein the plurality of process schemes includes at least one of a cyclic redundancy check, channel coding and rate matching (Cols. 3 lines 48 – 60, 4 lines 7 – 21).

Regarding Claim 12, Botha teaches all of the claimed limitations recited in Claim 8. Botha further teaches wherein a multiplexer is arranged to multiplex interleaved data output by the transport channel immediately prior to transmitting data to a physical layer (Col. 4 lines 23 – 29).

Regarding Claim 13, Botha teaches all of the claimed limitations recited in Claim 12. Botha further teaches wherein the physical layer comprises an interleaver for further interleaving of the signal output from the medium access control layer, immediately subsequent to combination of the transport channel (Col. 4 lines 30 – 38).

### ***Conclusion***

4. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Raymond S. Dean whose telephone number is 571-272-7877. The examiner can normally be reached on Monday-Friday 6:00-2:30.

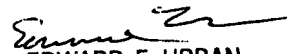
If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Edward F. Urban can be reached on 571-272-7899. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Art Unit: 2618

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.



Raymond S. Dean  
November 5, 2007



EDWARD F. URBAN  
SUPERVISORY PATENT EXAMINER  
TECHNOLOGY CENTER 2600

**Notice of References Cited**

Application/Control No.

10/029,933

Applicant(s)/Patent Under  
Reexamination  
BYSTED ET AL.

Examiner

Raymond S. Dean

Art Unit

2618

Page 1 of 1

**U.S. PATENT DOCUMENTS**

*		Document Number Country Code-Number-Kind Code	Date MM-YYYY	Name	Classification
*	A	US-7,272,769	09-2007	Botha, Louis Jacobus	714/752
	B	US-			
	C	US-			
	D	US-			
	E	US-			
	F	US-			
	G	US-			
	H	US-			
	I	US-			
	J	US-			
	K	US-			
	L	US-			
	M	US-			

**FOREIGN PATENT DOCUMENTS**

*		Document Number Country Code-Number-Kind Code	Date MM-YYYY	Country	Name	Classification
	N					
	O					
	P					
	Q					
	R					
	S					
	T					

**NON-PATENT DOCUMENTS**

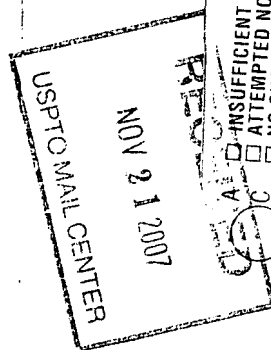
*		Include as applicable: Author, Title Date, Publisher, Edition or Volume, Pertinent Pages)
	U	
	V	
	W	
	X	

\*A copy of this reference is not being furnished with this Office action. (See MPEP § 707.05(a).)  
Dates in MM-YYYY format are publication dates. Classifications may be US or foreign.

Organization **NOX** Bldg/Rodm **NOX**  
United States Patent and Trademark Office  
P.O. Box 1450  
Alexandria, VA 22313-1450  
If Undeliverable Return in Ten Days

**AN EQUAL OPPORTUNITY EMPLOYER**

OFFICIAL BUSINESS  
PENALTY FOR PRIVATE USE, \$300



☐ INSUFFICIENT ADDRESS  
☐ ATTEMPTED NOT KNOWN  
☐ NO SUCH NUMBER/STREET  
☐ NOT DELIVERABLE AS ADDRESSED  
☐ OTHER

**RTS**  
RETURN TO SENDER